



Sixth Meeting of the Aeronautical Information Management Sub-Group (AIM SG/6)

Cairo, Egypt, 21-23 January 2020

Qatar



Outline

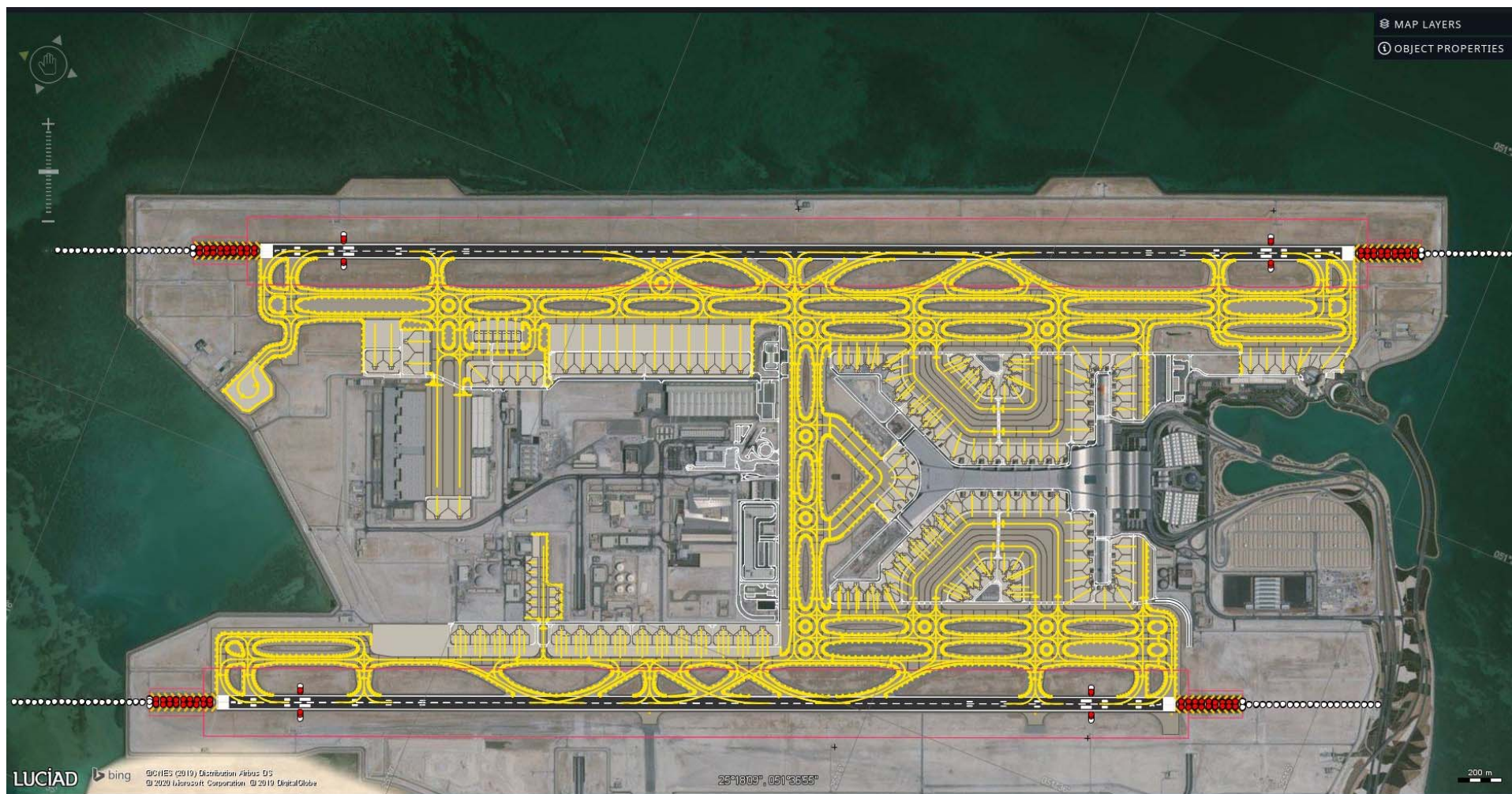
- **Qatar National AIM Implementation Roadmap**
- **Status of AIM Implementation and future plans**
- **Status of AIM Deficiencies**
- **Lessons Learned**
- **Challenges**
- **Recommendations**

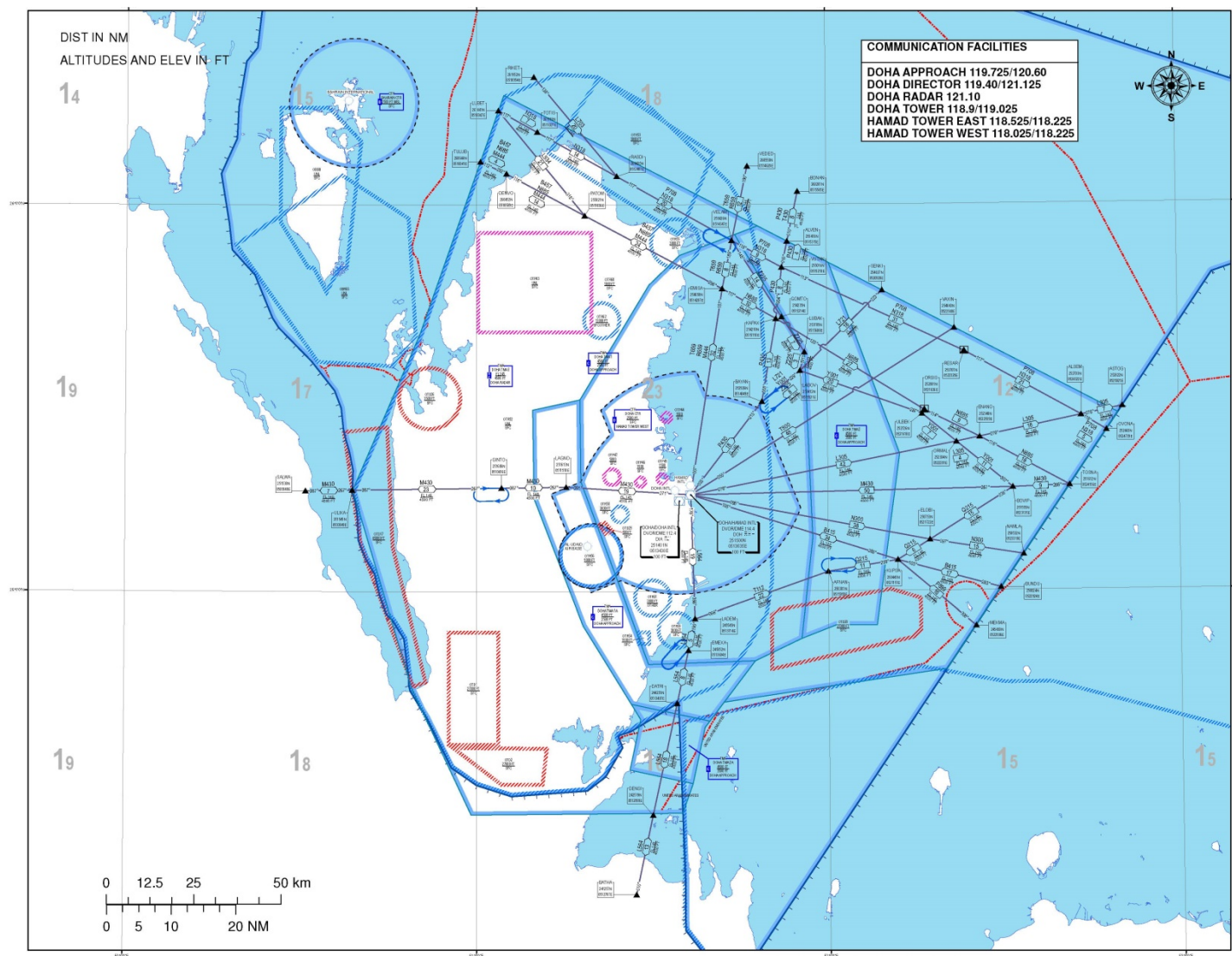


Qatar National AIM Implementation Roadmap

Step/Elements	AIS to AIM Step #	Timeline								Start	REMARKS
		2018 and before	2019	2020	2021	2022	2023	2024	2025		
AIXM database (AIXM 5.1)	P-06									2017	(P-07) UUID; (P-08) AICM embedded in AIMDB.
AIP datasets										2015	AIP datasets grouping on-going.
eAIP	P-11									2013	
Terrain A-1 dataset	P-13									2009	
Obstacles A-1 dataset	P-14									2009	Migration to AIXM 5.1 format on-going
Terrain A-4 dataset(s)	P-13									2009	
Obstacles A-4 dataset(s)	P-14									2009	Migration to AIXM 5.1 format on-going
Terrain A-2a dataset(s)	P-13									2013	
Obstacles A-2a dataset(s)	P-14									2013	Migration to AIXM 5.1 format on-going
NOTAM Improvements (Digital NOTAM)	P-21									2019	Acquisition of Digital NOTAM system on-going
Agreements with data originators	P-18									2010	SLA update on-going.
Provision of quality assured aeronautical data & information	P-01/P-02									2017	(P-01) Data quality; (P-02) Data integrity monitoring
Training	P-16									2012	Continuous training of AIM staff on-going.
Aeronautical data exchange	P-09									2017	1) AIP exchange implemented on Mar 2018; 2) IFP exchange TBD; 3) Chart exchange TBD.
Instrument Flight Procedure (IFP) datasets										2016	IFP datasets population/grouping on-going.
Dissemination of Aeronautical Info. SWIM environment	P-09										
Aerodrome mapping datasets	P-15									2017	Aerodrome mapping datasets population/grouping on-going.
Interoperability with MET	P-19										
Aeronautical information briefing (Digital Briefing)	P-12									2014	PIB online generation implemented on May 2014
Electronic aeronautical charts	P-20									2016	Interoperability between Charting System and AIMDB on-going

Legend: ☐ Not Started
☐ In Progress
☐ Implemented







Status of AIM Implementation (BO-DATM)



Status of AIM Implementation



B0 – DATM: Service Improvement through Digital Aeronautical Information Management				
Elements	Applicability	Status	Action Plan/Timelines	Remarks
National AIM Roadmap	Qatar	FI	-	
AIXM (+version)	Qatar	FI	-	AIXM 5.1
eAIP	Qatar	FI	-	
QMS	Qatar	FC	-	
WGS-84	ENR	FC	-	
	AD	FC		
	TMA	FC		
	GUND	FC		
eTOD	Area 1 Terrain	FC	-	
	Area 1 Obstacle	FC		
	Area 4 Terrain	FC		
	Area 4 Obstacle	FC		

FI – Fully Implemented; FC – Fully Compliant



Status of AIM Implementation



Provision of AIS/AIM products and services based on the Integrated Aeronautical Information Database (IAID)			
Elements	Status	Action Plan	Remarks
IAID	PI	Q2/2021	<i>System upgrade on-going</i>
AIXM (+version)	FI	-	<i>AIXM version 5.1</i>
eAIP (IAID-based)	PI	Q2/2021	
NOTAM (IAID-based)	FC	-	
SNOWTAM (IAID-based)	-	-	<i>Not applicable due to Local climate precludes the requirement</i>
PIB (IAID-based)	FC	-	
Charting (interoperable with IAID)	PC	Q2/2021	
Procedure Design (interoperable with IAID)	PI	Q2/2021	
ATS (interoperable with IAID)	NI	Q2/2021	

PI – Partially Implemented; FI – Fully Implemented; NI – Not Implemented; FC – Fully Compliant; PC - Partially Compliant



Status of AIM Implementation



Aeronautical Data Quality			
Elements	Status	Action Plan	Remarks
QMS	FC	-	
Formal agreement with originators	PC	Q4/2020	
Digital data exchange with originators	NI	Q2/2021	
Metadata	FC	-	
Data quality monitoring	FC	-	
Data integrity monitoring	FC	-	
AIRAC adherence	FC	-	

FC – Fully Compliant; PC - Partially Compliant; NI – Not Implemented



Status of AIM Implementation



WGS-84			
Elements	Status	Action Plan	Remarks
FIR/ENR	FC	-	
Terminal	FC	-	
AD	FC	-	
GUND	FC	-	

FC – Fully Compliant



Status of AIM Implementation



eTOD			
Elements	Status	Action Plan	Remarks
Area 1 Terrain	FC	-	
Area 1 Obstacles	FC	-	
Area 4 Terrain	FC	-	
Area 4 Obstacles	FC	-	
Area 2a Terrain	FC	-	
Area 2a Obstacles	FC	-	
Area 2b Terrain	FC	-	
Area 2b Obstacles	FC	-	
Area 2c Terrain	FC	-	
Area 2c Obstacles	FC	-	
Area 2d Terrain	FC	-	
Area 2d Obstacles	FC	-	
Area 3 Terrain	FC	-	
Area 3 Obstacles	FC	-	
AMDB	PI	Q2/2021	

FC – Fully Compliant; PI - Partially Implemented



Future Plans - Outlook 2025



- Implementation of Digital NOTAM
- Accessibility of aeronautical information services in SWIM network
- Availability of Electronic Aeronautical Chart



Status of AIM Deficiencies

AIM Deficiency	Status	Action Plan/Timelines	Remarks
None	-	-	-



Lessons Learned

- Necessity to introduce automated processing among AIM team (Data Processing, Publication, Charting).
 - Existing processes are tedious and less efficient as it requires a lot of paper work (*manual preparation/approval of forms and documents*).

- Improve coordination with data originator.
 - Data originator is unaware of aeronautical data element required.



Challenges

- Interoperability between different AIM systems (i.e. AIM Database, eAIP, Charting) and other systems (e.g. IFPS, PANS-OPS Procedure Design tools).
 - Encoding rules implemented from one system is different from other system
- Enhancement of existing AIM system to adopt the new standard and requirement.
 - System providers develops their product based on customer demand thus would result to delay in development or it will be costly for the customers who initially require for the new feature.
- Volume of data to be managed and maintained.



Recommendations

- Implementation of workflow management to address the AIM complex business processes as well as to include direct connection with stakeholders for productivity, traceability and integrity enhancement.
- Arrange an awareness seminar/workshop with data originator on emerging requirement in AIM domain.



Thank you